

February 11, 1993

Mr. Wynn E. Arnold
New Hampshire Public Utilities Commission
8 Old Suncook Road
Concord, NH 03301-5185

Dear Mr. Arnold:

This responds to your letter of February 3, 1993, to Cesar De Leon advising our office of the granting of a waiver of 49 CFR Part 193 by your Commission to Northern Utilities, Inc. for a mobile LNG facility located in Rochester, New Hampshire. Your letter states that the mobile LNG facility is necessary to prevent extreme pressure drops in a certain portion of the Rochester, New Hampshire distribution system in certain periods of "peak" usage. Failure to maintain adequate pressure through the use of the mobile LNG facility on these occasions will result in the extinguishment of pilot lights to appliances to the affected area.

Your Commission granted the Company's request for a waiver of Part 193 subject to a list of conditions described in the report incorporated into the Commission's order.

Based on the reasons presented in your grant of waiver, and the conditions placed on Northern Utilities, Inc. during the use of a mobile LNG facility, the Research and Special Programs Administration does not object to the grant of waiver for the site requirements in Subpart B, 49 CFR Part 193. That portion of the waiver can go into effect immediately. We have not reached a decision with respect to your waiver of the remaining requirements of Part 193. We plan to do so within the 60 day period.

Sincerely,
George W. Tenley, Jr.
Associated Administrator for Pipeline Safety

STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION
8 Old Suncook Road
Concord, N.H. 03301-5185

February 3, 1993

Mr. Cesar DeLeon
Director - Regulatory Programs, DPS-10
Office of Pipeline Safety
U.S. Department of Transportation
Room 8417
400 Seventh St., S.W.
Washington, D.C. 20590

RE: Northern Utilities, Inc. - Waiver of Requirements of 49CFR Part 193 for a Mobile LNG Facility.

Dear Mr. DeLeon:

A public hearing before the New Hampshire Public Utilities Commission was held on January 26, 1993 to take under consideration the above mentioned topic.

Based on the record and the representation of Northern Utilities, Inc. the commission granted a waiver subject to certain preconditions of the requirements of 49CFR Part 193 for a mobile LNG facility located in Rochester, New Hampshire.

The purpose of this letter, therefore, is to forward a copy of the commission's report and order to the Secretary of the Department of Transportation for his review pursuant to 49 U.S.C.A. §1672(d) (Supp.).

We understand that the Secretary has sixty (60) days to consider this waiver. However, due to the need that this facility be available immediately during cold weather, we ask that you expedite this matter as soon as possible. If you have any questions, please call me.

Sincerely,
Wynn E. Arnold
Executive Director & Secretary

Northern Utilities, Inc.
Report and Order Waiving Those Provisions of 49 C.F.R. 193
Relative to Mobile Liquefied Natural Gas Facilities

Appearances: Victor Platania and Ronald Danielson on behalf of Northern Utilities, Inc.; and Richard G. Marini and Robert Egan on behalf of the New Hampshire Public Utilities Commission.

REPORT

I. PROCEDURAL HISTORY

On November 2, 1992, Cesar DeLeon, Director, Pipeline Safety Regulatory Program of the United States Department of Transportation issued an opinion stating that Mobile Liquefied Natural Gas (LNG) facilities were subject to the provisions of 49 C.F.R. Part 193 (Part 193). This opinion was then disseminated to various state regulatory commissions, including the New Hampshire Public Utilities Commission (Commission), responsible for the enforcement of Part 193. 49 U.S.C.A. §1674.

As a result of these actions, Northern Utilities, Inc. (Northern or the Company) filed a petition with the Commission on January 5, 1993, pursuant to 49 U.S.C.A. 1672(d) (Supp.) and N.H. Admin. R., Puc chapter 200 requesting a waiver from Part 193 as it relates to a mobile LNG facility sited and operated by the Company in Rochester, New Hampshire over the past ten (10) years. See, Appendices I and II.

On January 20, 1993, the Commission issued an Order of Notice scheduling a hearing on the requested waiver for January 26, 1993.

II. POSITIONS OF THE PARTIES AND STAFF

A. Northern

At the January 26, 1993, hearing Northern took the position and presented evidence that the mobile LNG site in question was only used in extraordinary circumstances to ensure safe and adequate service to its customers, substantial safety precautions have been and will be taken relative to the site, and that the necessity of the site will be negated by system upgrades in the near future. The Company also testified that the application of the requirements of Part 193 to its mobile LNG site in Rochester, N.H. would be unduly burdensome and economically inefficient in the provision of service to its customers. Based on this evidence the Company requested that the Commission grant the requested waiver and support the waiver before the Department of Transportation.

C. Staff

Staff concurred in the Company's request for a waiver providing the Company complied with a list of conditions precedent to the granting of a waiver which they believed would protect the general public and the Company's customers in the absence of the application of Part 193 which Staff agreed was unduly cumbersome and economically inefficient in the provision of service to the Company's customers.

The conditions precedent are as follows:

1. All LNG transports must be designed, constructed, initially tested, operated and maintained in accordance with federal law and rules.
2. All portable LNG equipment must be operated by at least one person qualified by experience and training in the safe operation of these system. All other operating personnel, at a minimum, must be qualified by training.
3. All portable LNG equipment must be sited so as to minimize the possible hazard to the public consistent with the need to provide the service.
4. Portable LNG equipment must be reasonably protected against vehicular damage.
5. Reasonable provision must be made for safely containing or controlling leakage of LNG from valves, pipes,

vaporizers or hoses.

6. Reasonable provision must be made to minimize the possibility of accidental ignition in the event of a leak.
7. Provision must be made to ensure that the introduction of vaporized LNG will not reduce the odorization level of the system gas below the level required by regulations.
8. All portable equipment must be continuously attended during the time LNG transport is connected to the other portable equipment, or other means of continuous monitoring must be maintained.
9. The portable LNG equipment must be periodically monitored for leakage by leakage detection equipment when the LNG transport is connected to the other portable equipment.
10. Reasonable provision must be made to restrict access by the general public when the LNG transport is on site.
11. Portable fire fighting equipment must be present at all times and properly maintained to allow for effective control of LNG or natural gas fires at the site.
12. Personnel operating the portable LNG facilities must be trained in the proper use of such fire fighting equipment.
13. Reasonable provision must be made to continuously monitor the portable equipment as to the impact on the distribution system being served to ensure appropriate pressures and temperatures are being maintained.
14. Means of communication must exist between the personnel operating the portable LNG facilities and a manned operating center and local emergency authorities.
15. If practical, notification will be given to the Public Utilities Commission and the local fire fighting agency prior to operating the facility, except that in the event of an emergency where the integrity of the system would be impaired by a delay due to notification, the operation may commence and notification shall be provided.
16. The Company will provide training pertinent to the facility and LNG in general, to the local fire fighting agency.

III. COMMISSION ANALYSIS

Northern presented testimony that mobile LNG facilities had been in place at this and other sites in the Rochester, New Hampshire area for approximately ten years to address a "bottleneck" to a certain portion of their Rochester, New Hampshire distribution system that could result in extreme pressure drops in the system in certain periods of "peak" usage. The Company testified that during the past ten years mobile LNG had only been dispatched to the sites on "three or four" occasions, and that failure to maintain adequate pressure through the use of the mobile LNG facility on these occasions could have resulted in the extinguishment of pilot lights to appliances to the affected area requiring the shut down of the entire distribution system down stream from the "bottleneck". The Company also testified that system upgrades would negate the need for the site and facility within the next four years.

In regard to safety precautions the Company has taken relative to the site, the Company testified that the facility, which is located along Route 125 in Rochester, New Hampshire, is protected by "Jersey Barriers" to prevent vehicular traffic from penetrating the site, and has vapor barrier fences permanently in place around the vaporizer and boiler. They further testified that they had been in contact with the Rochester, New Hampshire Fire Department and informed them of the potential hazards of LNG and had scheduled training sessions with the Fire Department, which is located approximately two miles from the site, on the proper procedures to be taken in the case of an emergency involving the LNG.

The Company testified that the mobile LNG unit was owned and operated by TransGas under contract to Northern, TransGas maintains the units in accordance with federal law and in service. When the unit is on site, the unit and facilities are operated, maintained and monitored by the driver/operator and two trained employees of the Company. The site is in constant radio communication with a company dispatcher (24 hours a day) and is also equipped with

telephone service. In case of emergency there are at least three thirty pound fire extinguishers on site with the mobile unit and all individuals on site are trained to use the equipment. The Company further testified that all sources of electricity and other potential spark producing hazards were off-site and that the mobile LNG unit odorizes the vaporized LNG prior to entering the distribution system.

In response to the preconditions for a waiver set forth by the Staff the Company testified it was already in compliance with those preconditions as set forth above and would ensure that gas detection equipment would be used when the unit was on site, that they would appropriately notify the Commission in the event of an incident and would otherwise comply with all of the conditions set forth by Staff including, but not limited to, the provision of a diagram designating the design and operating specifications of the facility. See, Appendix III.

Based on the above record and the representations of the Company the Commission finds, pursuant to N.H. Admin. R., Puc 201.05, that a waiver of N.H. Admin. R., Puc 506.01, adopting 49 C.F.R. Part 193 by reference, is in the public interest because the Company has demonstrated an "existing peculiarity" and "unusual circumstance" in the Rochester, New Hampshire distribution system warranting a departure from the rule, and because the Company has demonstrated that its "alternative procedure" to ensure the safety of the public is "consistent with the policies embodied in said rule". Puc 201.05

Furthermore, the commission finds that applying the requirements of Part 193 to this mobile LNG unit would be unduly burdensome and economically inefficient in the provision of service to Northern's customers.

Our order will issue accordingly.

Concurring:

February 3, 1993

Douglas L. Patch
Chairman

Bruce B. Ellsworth
Commissioner

Linda G. Stevens
Commissioner

Northern Utilities Inc.
Order Waiving Those Provisions of 49 C.F.R. 193 Relative to
Mobile Liquified Natural Gas Facilities

ORDER N O. 20,740

Upon consideration of the foregoing Report, which is made a part hereof; it is hereby ORDERED, that Northern Utilities, Inc. request for a waiver from N.H. Admin. R., Puc 506.01, adopting 49 C.F.R. Part 193 by reference, pursuant to N.H. Admin. R., Puc 201.05 and 49 U.S.C.A. §1672(d) (Supp.) is granted; and it is

FURTHER ORDERED, that the Commission's Executive Director and Secretary immediately forward a copy of this Report and Order granting the requested waiver to the Secretary of the Department of Transportation for his review pursuant to 49 U.S.C.A. §1672(d) (Supp.).

By order of the New Hampshire Public Utilities Commission this third day of February, 1993.

Douglas L. Patch
Chairman

Bruce B. Ellsworth
Commissioner

Linda G. Stevens
Commissioner

Attested by:
Wynn E. Arnold
Executive Director & Secretary

APPENDIX I

Northern Utilities, Inc.
325 West Road
PO Box 508
Portsmouth NH 03802-0508

January 5, 1993

Mr. Richard G. Marini, P.E.
Gas Safety Engineer
New Hampshire Public Utilities Commission
8 Old Suncook Road
Concord, NH 03301-5185

Dear Mr. Marini:

In response to the memo dated November 2, 1992 from Cesar DeLeon, Director Pipeline Safety Regulatory Program to Richard Sanders, Manager Pipeline Safety Division and circulated to the various state regulating agencies concerning mobile LNG facilities, Northern Utilities would like to apply for a waiver on the use of its portable LNG facility in Rochester, NH.

The Rochester, NH system consists of a 150 lb. high pressure one-way feed into a regulator station with a 50 lb. outlet feeding approximately 1,378 customers with a peak hourly send out of approximately 149 MCFH. Our engineering analysis has identified a potential problem with this system in the event our high pressure supply to the area is inadequate. The addition of our portable unit will insure adequate supply to the area in the event of a problem.

The portable unit is a 150 MCF per hour unit at 50 lb. The facility will be housed on site within a vapor fence with Jersey barriers installed between the vaporizer and the road to protect the facility which was a request of the Rochester Fire Department. The unit will be continuously manned with at least two trained operators and a Trans Gas LNG certified driver during operation. In the event the portable unit is required, we anticipate its operation encompassing a 2 to 4 hour period during the morning peak supply load and an additional 2 to 4 hours period during the evening peak load. We have contacted the Rochester Fire Department and have incorporated their suggestions into our facility placement in the area and have scheduled training sessions with their personnel when the unit is placed at the site. There will be no LNG product at the site other than the times stated previously. Northern Utilities has initiated a 4 year plan to replace the existing mains feeding the system and with the advent of the Portland pipeline in 1996 this facility will no longer be required.

Sincerely,
Vic Platania, Manager
Gas Operations

APPENDIX III

Northern Utilities, Inc.
325 West Road
PO Box 508
Portsmouth NH 03802-0508

January 29, 1993

Mr. Richard Marini, P.E.
State of New Hampshire
Public Utilities Commission
8 Old Suncook Rd
Concord NH 03301-5185

Dear Mr. Marini:

This correspondence is included as part of Northern Utilities' request for a waiver with regard to the operation of a portable LNG vaporizer at the Rochester, New Hampshire regulator station.

In order to maintain gas supply to the communities located north of the Varney Brook metering station in Dover while minimizing the need to operate the portable vaporizer, Northern Utilities has planned to replace the following distribution mains as system improvements based on design day conditions:

1993 - Replace approximately 6,000' of 4" bare steel main with 8" coated steel along the 500 psi line between the Gulf Road station in Dover, and the High Street station in Somersworth.

1994 - Replace an additional 5,200' of 4" bare steel main with 8" coated steel along the 500 psi line between the Gulf Road station in Dover, and the High Street station in Somersworth.

- Replace approximately 5,200' of 4" bare steel main with 8" coated steel along the 150 psi line between Somersworth and Rochester.

1995 - Replace the balance of 4" bare steel (approximately 2.5 miles) with 8" coated steel along the 500 psi line between the Gulf Road station in Dover, and the High Street station in Somersworth.

1996 - No additional improvements necessary to the distribution system as the Portland Natural Gas Transmission System pipeline is scheduled for construction this year.

Very truly yours,
Edward Wencis
Engineering Manager

Northern Utilities, Inc.
325 West Road
PO Box 508
Portsmouth NH 03802-0508

January 29, 1993

Mr Richard Marini P.E.
State of New Hampshire
Public Utilities Commission
8 Old Suncook Rd
Concord NH 03301-5185

Dear Mr. Marini:

Enclosed are schematics detailing the Rochester Regulation Station and the LNG portable unit (both vaporizer & boiler).

In addition to this information, the Rochester system is monitored at our Ludlow 24-hour Dispatch Center by two (2) telemeters. One on the inlet 150 psi line and the second on the 45 psi (distribution operating pressure) line. In addition to these telemeters, there is also a recording chart at the tail end of the system which is picked up and changed weekly.

Sincerely,
Vic Platania, Manager
Gas Operations

Northern Utilities, Inc.
325 West Road
PO Box 508
Portsmouth NH 03802-0508

January 29, 1993

Mr. Richard G. Marini, PE
New Hampshire Public Utilities Commission
8 Old Suncook Road
Concord, NH 03301

Re: Public Hearing DE 93-008
January 26, 1993

Dear Mr. Marini:

This letter confirms our conversation of January 29, 1993 and clarifies the first condition with respect to Northern Utilities' request for a waiver from the Pipeline safety Regulations part 193 – Liquefied Natural Gas Facilities: Federal Safety standards.

This condition specified that all LNG transports must be designed, constructed, initially tested, operated and maintained in accordance with 49 CFR 172. The following sections of 49 CFR apply to the above requirements for LNG transports:

- 171 Regulations and definitions
- 172 Shipping papers – markings – placarding
- 173 Classification of materials
- 177 Carriage by public highway
- 178 Cargo tank specifications
- 180 Qualification, tests, inspections
- 394 Reporting of accidents
- 396 Inspections, repairs, maintenance
- 397 Driving and parking rules

Thank you for your assistance in this matter. If you require any additional information, please contact me.

Very truly yours,
Ronald P Danielson
Manager, Gas Supply Operations